

**MISSOURI DEPARTMENT OF ELEMENTARY AND SECONDARY  
EDUCATION  
SCHOOL FOOD SERVICES**

**Nutrient Standard Menu Planning**

Nutrient Standard Menu Planning (NSMP) is a method to develop menus based upon an analysis for nutrients in the menu items and food items offered over a school week to determine if specific levels for a set of key nutrients and calories were met. LEAs choosing NSMP must conduct nutrient analysis on all menu items or foods offered as part of the reimbursable meal.

In Planning Menus Under NSMP, LEAs must plan to provide minimum calorie and nutrient levels for school lunches and breakfasts for specific **grade groups** or, at the LEA option, plan to provide minimum calorie and nutrient levels for school lunches and breakfasts for specific **age groups**. The accompanying charts provide the minimum calorie and nutrient levels necessary for both the specific grade or age groups. The actual minimum calorie and nutrient levels required will vary depending upon the grouping used, age, or grade.

Standardized Recipes Under NSMP must be developed and followed. A standardized recipe is one that was tested to provide an established yield and quantity through the use of ingredients that remain constant in both measurement and preparation.

A Reimbursable Lunch Under NSMP must consist of a minimum of three items. One menu item must be an entree (a single food or a combination of foods that is offered as the main course), a fluid milk as a beverage, and one other item. All menu items or foods offered as part of the reimbursable meal will count toward

meeting requirements, except foods identified as "foods of minimal nutritional value," unless offered as part of a menu item in a reimbursable meal.

Under The Offer Versus Serve Provision for Lunch, LEAs must offer students at least three menu items as described. Senior high school students must select at least two menu items; one menu item must be the entree. When more than three menu items are offered, students may refuse only two items. Again, the entree must be selected. At the discretion of the LEA, students below the senior high level may also participate in offer versus serve.

A Reimbursable Breakfast Under NSMP must consist of a minimum of three menu items. One menu item must be fluid milk served as a beverage or on cereal or both.

Under The Offer Versus Serve Provision for Breakfast, LEAs must offer students at least three menu items. Senior high school students must select at least two menu items. A maximum of only one menu item can be refused. At the discretion of the LEA, students below the senior high level may also participate in offer versus serve.

LEAs Are Encouraged To Provide A Variety Of Foods and offer a selection of menu items and foods from which children may make choices.

Adequate Personal Computer (PC) Assets must be available at the LEA level to conduct calorie and nutrient analysis of menus as required under NSMP. The minimum PC system requirements needed to support NSMP is a 386 SX - 20 MHz based PC or higher with 8 M RAM. However, a 486 DX - 66 MHz with 16 M RAM is recommended with a Super VGA Color Monitor (640 x 480 with 256 Colors); DOS 5.0 or higher; or Windows 3.1 or higher, Mouse, and Laser Printer.

Nutrient analysis will be based upon calorie/nutrient information provided in the National Nutrient Database for Child Nutrition Programs. This data base will be incorporated into PC software used to conduct nutrient analysis.

LEAs selecting the NSMP method will have to purchase the necessary PC software. Any PC software purchased to conduct nutrient analysis must be evaluated by the Food and Consumer Service (FCS). LEAs contemplating purchasing software are strongly encouraged to fully investigate, compare, and try out all approved software programs fully before deciding on a **Nutrient Standard, Assisted Nutrient Standard, and Food Based Menu Planning for School Lunch**

Software Used Has To Have Been Evaluated and approved by the USDA Food and Nutrition Service (FNS). Nutrient analysis will be based upon calorie/nutrient information provided in the Child Nutrition Database.

# Grade Groups For Nutrient Standard, Assisted Nutrient Standard, and Enhanced Food Based Menu Planning

## School Lunch

### MINIMUM REQUIREMENTS FOR NUTRIENT AND CALORIE LEVELS FOR SCHOOL LUNCH (School week averages)

#### Grade Groupings

Nutrients and Energy Allowances	Preschool	Grades K-6	Grades 7-12	Option for Grades K-3
Energy Allowance (calories)	517	664	825	633
Total fat	<sup>1</sup>	<sup>1</sup>	<sup>1</sup>	<sup>1</sup>
Saturated fat	2	2	2	2
Protein (g)	7	10	16	9
Calcium (mg)	267	286	400	267
Iron (mg)	3.3	3.5	4.5	3.3
Vitamin A (RE)	150	224	300	200
Vitamin C (mg)	14	15	18	15
Cholesterol (mg) <sup>3</sup>	100	100	100	100
Fiber (g) <sup>3</sup>	3	4	7	4
Sodium (mg) <sup>3</sup>	1350	1350	1350	1350

<sup>1</sup> Total fat not to exceed 30 percent of calories over a school week.

<sup>2</sup> Saturated fat to be less than 10 percent of calories over a school week.

<sup>3</sup> State Guidance

## Optional Age Groups For Nutrient Standard and Assisted Nutrient Standard

### School Lunch

### OPTIONAL MINIMUM NUTRIENT AND CALORIE LEVELS FOR SCHOOL LUNCH (School week averages)

#### Age Groupings

Nutrients and Energy Allowances	Ages 3-6	Ages 7-10	Ages 11-13	Ages 14 and above
Energy Allowances(calories)	558	667	783	846
Total fat	<sup>1</sup>	<sup>1</sup>	<sup>1</sup>	<sup>1</sup>
Saturated fat	2	2	2	2
Protein (g)	7.3	9.3	15.0	16.7
Calcium (mg)	267	267	400	400
Iron (mg)	3.3	3.3	4.5	4.5
Vitamin A (RE)	158	233	300	300
Vitamin C (mg)	14.6	15.0	16.7	19.2
Cholesterol (mg) <sup>3</sup>	100	100	100	100
Fiber (g) <sup>3</sup>	3	5	6	7
Sodium (mg) <sup>3</sup>	1350	1350	1350	1350

<sup>1</sup> Total fat not to exceed 30 percent of calories over a school week.

<sup>2</sup> Saturated fat to be less than 10 percent of calories over a school week.

<sup>3</sup> State Guidance

# Grade Groups For Nutrient Standard, Assisted Nutrient Standard, and Enhanced Food Based Menu Planning School Breakfast

## MINIMUM REQUIREMENTS FOR NUTRIENT AND CALORIE LEVELS FOR SCHOOL BREAKFAST

(School week averages)

### Grade Groupings

Nutrients and Energy Allowances	Preschool	Grades K-12	Option for Grades 7-12
Energy Allowances (calories)	388	554	618
Total Fat	1	1	1
Total Saturated Fat	2	2	2
Protein (g)	5	10	12
Calcium (mg)	200	257	300
Iron (mg)	2.5	3.0	3.4
Vitamin A (RE)	113	197	225
Vitamin C (mg)	11	13	14
Cholesterol (mg) <sup>3</sup>	75	75	75
Fiber (g) <sup>3</sup>	2	4	5
Sodium (mg) <sup>3</sup>	1000	1000	1000

<sup>1</sup> Total fat not to exceed 30 percent of calories over a school week.

<sup>2</sup> Saturated fat to be less than 10 percent of calories over a school week.

<sup>3</sup> State Guidance

# Age Groups For Nutrient Standard and Assisted Nutrient Standard School Breakfast

## OPTIONAL MINIMUM NUTRIENT AND CALORIE LEVELS FOR SCHOOL BREAKFAST

(School week averages)

### Age Groupings

Nutrients and Energy Allowances	Ages 3-6	Ages 7-10	Ages 11-13	Ages 14 and above__
Energy Allowances(calories)	419	500	588	625
Total Fat	1	1	1	1
Saturated Fat	2	2	2	2
Protein (g)	5.50	7.00	11.25	12.50
Calcium (mg)	200	200	300	300
Iron (mg)	2.5	2.5	3.4	3.4
Vitamin A (RE)	119	175	225	225
Vitamin C (mg)	11.00	11.25	12.50	14.40
Cholesterol (mg) <sup>3</sup>	75	75	75	75
Fiber (g) <sup>3</sup>	2	3	4	5
Sodium (mg) <sup>3</sup>	1000	1000	1000	1000

<sup>1</sup> Total fat not to exceed 30 percent of calories over a school week.

<sup>2</sup> Saturated fat to be less than 10 percent of calories over a school week.

<sup>3</sup> State Guidance